Standard Operating Procedure for Meteorological Data Aboard the RV/Lake Guardian

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1.0 Scope and Application

1.1 This method, applicable to all surveillance cruises performed by the RV/Lake Guardian was in effect during the calendar years 1994 and 1995.

1.2 These procedures are implemented while the vessel is underway and while occupying a sampling station.

2.0 Summary of Method

The officer in charge of the bridge is responsible for implementing the procedures herein described. On the hour, the following parameters are recorded in the ship's log: wind speed and direction, wave height and direction, air temperature, barometric pressure, visibility, present weather conditions and heading (when underway). For each significant event the time and description is recorded. At each sampling station, the station identification, arrival time, departure time, wind speed and direction, wave height and direction, barometric pressure, water depth, air temperature, geographic location (loran and/or GPS), and final location (if vessel has drifted during sampling) are recorded. The deviation of the ship time from Greenwich mean time is recorded daily.

3.0 Apparatus

3.1 Wind Speed and Wind Direction meter.
Electric Speed Indicator Company, Cleveland Ohio.
U.S. Dept. of Commerce, Weather Bureau.
Built-in correcting device for the Ship heading.

3.2 Aneroid Barometer.

3.3 Electronic thermometer.
RMS Technology for the Weather Bureau.

3.4 Gyro-Compass, Sperry SR 130.

3.5 Magnetic Compass, Ritchie 5".

3.6 Fathometer, Furuno FE 881 Mk-11.

3.7 Loran, Northstar 800.

3.8 GPS StaNav, Furuno GP 500.

3.9 Doppler Speed Log, JEC JLN-203.